et al., 1992; Bristow et al., 2000; Neal and Roberts, 2000; Barnhardt et al., 2002; Jol et al., 1996, 2002; Havholm et al., 2004; Culver et al., 2006). Ground penetrating radar works by transmitting radar (radio) waves into the ground and recording the energy as it is reflected from boundaries associated with changes in sediment type beneath the

surface. The data provide a profile of the geology such that different layers of rock or sediment can be mapped and interpreted (Fig. 7). Inlet channels that are filled with sand have distinctive appearances in the GPR data (Figs. 7B and C).

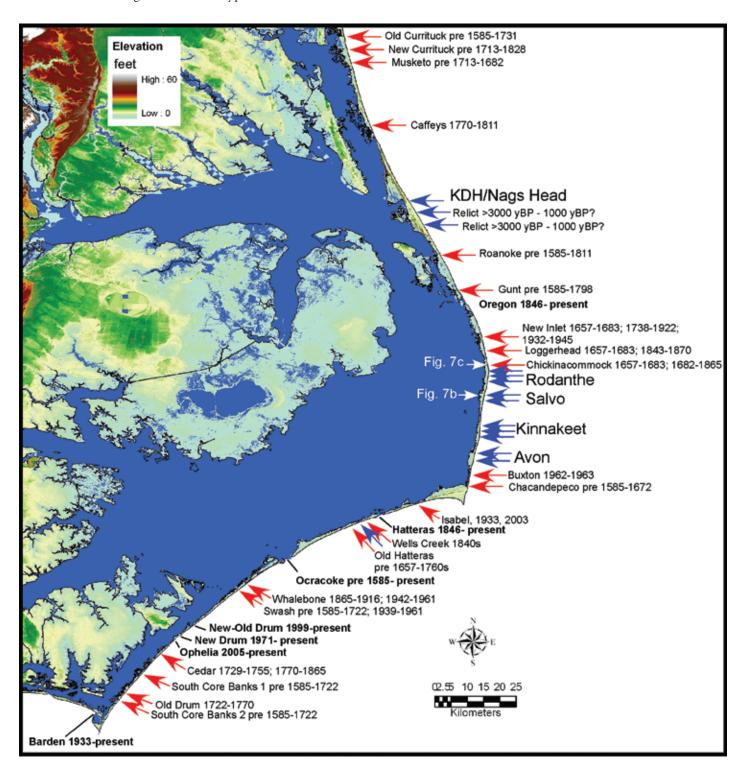


Figure 6. Map illustrating the approximate locations and dates of existence of documented historic inlets (red arrows) and previously undocumented inlet channels (blue arrows) discovered using ground-penetrating radar data.